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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,148	02/15/2002	Michael J. Sullivan	P-5474-D1-C1-C1	5579
24492	7590	04/20/2004	EXAMINER	
THE TOP-FLITE GOLF COMPANY, A WHOLLY OWNED SUBSIDIARY OF CALLAWAY GOLF COMPANY P.O. BOX 901 425 MEADOW STREET CHICOPEE, MA 01021-0901			GORDON, RAEANN	
			ART UNIT	PAPER NUMBER
			3711	

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/077,148

Applicant(s)

SULLIVAN ET AL.

Examiner

Raeann Gorden

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 38-42,44-49 and 51-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 38-42,44-49 and 51-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 38-42, 44-49 and 51-57 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yamagishi et al (5,779,563). Regarding claim 38, Yamagishi discloses a golf ball comprising a solid core, an inner cover layer and an outer cover layer (abstract). The inner cover layer is made from Himilan, a well-known trade name for ionomer resins (table 4, col 9). The outer cover layer is made from polyurethane and has a Shore D hardness from 40 to 68 (col 4, lines 5-16; table 2). With respect to the core PGA compression, applicant discloses the conversion of deformation to PGA compression (spec pages 19-20). The PGA scale is from 0 to 200. For every one thousandth of an inch (0.001) a ball deflects one point is deducted from 200. Yamagishi discloses a core deflection from 2 to 5 mm or 0.079 to 0.197 inch, which converts to a core PGA compression from 3 to 121. Regarding claim 40, Yamagishi discloses the ball has a diameter of 42.7 mm or 1.68 inches (table 4). Regarding claim 42, the outer cover layer has a Shore D hardness from 40 to 68 (col 4, line 7). Regarding claims 44 and 45, the outer cover layer has a thickness from 0.3 to 2.5 mm or 0.01 to 0.098 inch (col 4, lines 35-37). Regarding claim

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47, the solid core is made from a polybutadiene (col 3, lines 2-7). The outer cover layer is made from polyurethane and has a Shore D hardness from 40 to 68 (col 4, lines 5-16). ). With respect to the core PGA compression, applicant discloses the conversion of deformation to PGA compression (spec pages 19-20). The PGA scale is from 0 to 200. For every one thousandth of an inch (0.001) a ball deflects one point is deducted from 200. Yamagishi discloses a core deflection from 2 to 5 mm or 0.079 to 0.197 inch, which converts to a core PGA compression from 3 to 121. Regarding claims 51 and 52, the outer cover layer has a thickness from 0.3 to 2.5 mm or 0.01 to 0.098 inch (col 4, lines 35-37). Regarding claim 53, the solid core is made from a polybutadiene (col 3, lines 2-7). The inner cover layer is made from Himilan, a well-known trade name for ionomer resins (table 4, col 9). The outer cover layer is made from polyurethane and has a Shore D hardness from 40 to 68 (col 4, lines 5-16). With respect to the core PGA compression, applicant discloses the conversion of deformation to PGA compression (spec pages 19-20). The PGA scale is from 0 to 200. For every one thousandth of an inch (0.001) a ball deflects one point is deducted from 200. Yamagishi discloses a core deflection from 2 to 5 mm or 0.079 to 0.197 inch, which converts to a core PGA compression from 3 to 121. Regarding claim 55, the ball has a diameter of 42.7 mm or 1.68 inches (table 4). Regarding claims 38, 39, 41, 48, 54, and 56 applicant claims PGA ball compression and coefficient of restitution, the properties will be overlap the properties of Yamagishi. Yamagishi discloses a solid golf ball comprising a polybutadiene core, an ionomeric inner cover, and a polyurethane outer cover. Applicant claims the same materials disclosed by Yamagishi for each layer.

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Furthermore, although Yamagishi is silent to the properties one skilled in the golf ball art is aware that nearly all golf balls have a PGA compression between 70 and 100. Golf balls outside this range are usually discarded. Golf balls with a very low PGA compression are too soft for use and golf ball with a very high PGA compression are too hard. The coefficient of restitution (COR) also has a common range in the golfing art between 0.7 and 0.8. Golf balls do not have low COR values because the collision between the ball and club would not be satisfactory and would not give the ball proper initial velocity. In regards to claims 46, 49, and 57, Yamagishi discloses applicant's invention therefore the performance features such as mechanical impedance will also be the same as applicant's. One of ordinary skill in the art would have modified Yamagishi to achieve the optimal initial velocity and spin of the golf ball.

### ***Response to Arguments***

Applicant's arguments filed 2-5-04 have been fully considered but they are not persuasive. Applicant argues the claimed core compression less than 55 is not disclosed by the prior art of record, Yamagishi. Yamagishi discloses a core deflection from 2 to 5 mm or 0.079 to 0.197 inch, which converts to a core PGA compression from 3 to 121. The deflection was converted by using the conversion in applicant's specification as shown in the rejection above. Applicant argues the range disclosed by Yamagishi cannot be converted because the loads are different. The Examiner disagrees. Yamagishi discloses a load of 100 kg for the deflection while the PGA

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compression discloses a load of 200 lbs (page 20 of app's spec). 200 pounds converts to approximately 90 kg.

In response to applicant's statement that the burden is on the Examiner to provide some technical reasoning to support inherency or obviousness, the Examiner has provided the evidence in the rejection above. The present invention claims a golf ball comprising a core, an inner cover layer, and an outer cover layer. The core compression of Yamagishi overlaps the range of applicant's core as shown above. Yamagishi further discloses an inner cover layer made from an ionomer and an outer cover layer made from a polyurethane with a hardness that overlaps applicant's hardness. Since the materials as well as properties of the layers have been shown to overlap applicant's the properties of the completed golf ball must also overlaps applicant's, i.e., ball compression and COR.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raeann Gorden whose telephone number is 703-308-8354. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Raeann Gorden  
Examiner  
Art Unit 3711

Rg  
April 19, 2004